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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,997	08/01/2003	Peiyuan Wang	09797.0002-00	8974

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EXAMINER
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HUYNH, CARLIC K

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/632,997	<b>Applicant(s)</b> WANG ET AL.	
	<b>Examiner</b> Carlic K. Huynh	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

The examiner has hereby withdrawn a restriction requirement made on 10/2/06. The following restriction requirement is to be considered.

#### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6 and 10-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is any group other than  $-NR'$  or  $-CR'_2$ , and W is assumed to be O by the examiner, classified in class 514, subclass 221.
  - II. Claims 1-6 and 10-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is any group other than  $-NR'$  or  $-CR'_2$ , and W is assumed to be O by the examiner, classified in class 514, subclass 221.
  - III. Claims 1-6 and 10-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is  $-NR'$  such that  $R^1$  or  $R^3$  can come together with  $-NR'$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.

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- IV. Claims 1-6 and 10-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- V. Claims 1-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a bicyclic ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- VI. Claims 1-6 and 10-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is  $-NR'$  such that  $R^1$  or  $R^3$  can come together with  $-NR'$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- VII. Claims 1-6 and 10-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- VIII. Claims 1-12, drawn to a method of treatment of an HCV infection comprising administering a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is

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independently heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a bicyclic ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.

- IX. Claims 13-18 and 22-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is any group other than  $-NR'$  or  $-CR'_2$ , and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- X. Claims 13-18 and 22-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is any group other than  $-NR'$  or  $-CR'_2$ , and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- XI. Claims 13-18 and 22-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is  $-NR'$  such that  $R^1$  or  $R^3$  can come together with  $-NR'$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- XII. Claims 13-18 and 22-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.

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- XIII. Claims 13-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently any group other than heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a bicyclic ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- XIV. Claims 13-18 and 22-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is  $-NR'$  such that  $R^1$  or  $R^3$  can come together with  $-NR'$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- XV. Claims 13-18 and 22-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a 5-7 membered ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.
- XVI. Claims 13-24, drawn to a compound of formula (I), where  $R^1$ ,  $R^3$ ,  $R^6$ , and  $R^7$  is independently heterocycle or heteroaryl,  $R^2$  is  $-CR'_2$  such that  $R^1$  or  $R^3$  can come together with  $-CR'_2$  to form a bicyclic ring, and W is assumed to be O by the examiner, classified in class 514, subclass 221.

2. Inventions I-VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions I and II are related as they involve methods of treating HCV with structurally unrelated compounds such as compounds containing a heterocycle or heteroacyl group (Invention II), compounds containing a

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5-7 member ring structure (Inventions III, IV, VI, and VII), or compounds with a bicyclic ring structure (Inventions V, VIII).

3. Inventions [IX-XVI] and [I-VIII] are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, (1) other compounds can be used in a method of treatment, e.g. anti-cancer agents and antibiotics, and (2) other methods of treatments of an HCV infection can be used with a compound of formula (I).

Because these inventions are independent or distinct for the reasons given above and the search required for Group [I-VIII] is not required for Group [IX-XVI], restriction for examination purposes as indicated is proper. It is noted that while the searches of Groups [I-VIII] and [IX-XVI] may be overlapping, there is no reason to believe that the searches would be coextensive. In searching Group [I-VIII], the examiner will be focusing on the patentability of a method of treatment of an HCV infection and not on a compound of formula (I) of Group [IX-XVI]. Conversely, in searching Group [IX-XVI], the examiner will be focusing on the patentability of a compound and not a method of Group [I-VIII].

4. Inventions IX-XVI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions IX-XVI are unrelated as they relate to structurally different compounds and/or compositions such as compounds and/or compositions containing a heterocycle or heteroacyl group (Invention X),

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compounds and/or compositions containing a 5-7 member ring structure (Inventions XI, XII, XIV, XV), or compounds and/or compositions containing a bicyclic ring structure (Inventions XIII and XVI).

5. This application contains claims directed to the following patentably distinct species:

(1) a single disclosed species of formula (I).

If any one of Group I-XVI is elected, the applicant is required under 35 U.S.C. 121 to elect (1) a single disclosed species of formula (I) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1,3, 6-11, 13, 15, and 18-24 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.



Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

A telephone call to the attorney is not required where: 1) the restriction requirement is complex, 2) the application is being prosecuted pro se, or 3) the examiner knows from past experience that a telephone election will not be made (MPEP § 812.01). Therefore, since this restriction requirement is considered complex, a call to the attorney for telephone election was not made.

#### ***Notice of Possible Rejoinder***

6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102,

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103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlic K. Huynh whose telephone number is 571-272-5574. The examiner can normally be reached on Monday to Friday, 8:30AM to 5:00PM.

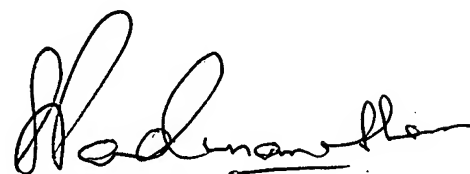
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ckh

A handwritten signature in black ink, appearing to read 'Sreeni Padmanabhan', written in a cursive style.

SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER